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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Onchuen Daryn Lau

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05/22/2006

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EXAMINER

WEINMAN, SEAN M

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/997,507	Applicant(s) LAU ET AL.	
	Examiner Sean Weinman	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 11/01/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-21 and 36-44 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 22-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 5-16,21 and 36-40 is/are allowed.
- 6) ☒ Claim(s) 1,4, 17-20, and 41-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/01/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1, 3-21, and 36-44 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

Claims 4, 17-20 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites “job processor” in line 11, 13, 14, 17, and 21 in the respective claim. It is unclear whether this is intended to be the same as or different from the “job processor units” recited in claim 4 lines 2-3. Additionally, claim 4 recites “job requestors” in line 13, 15, and 17 in the respective claim. It is unclear whether this is intended to be the same as or different from the “job requestor units” in claim 4 line 2.

Claim 17 recites “a respective one of the alignment queues” in line 3-4 in the respective claim. It is unclear whether this is intended to be the same as or different from the “respective one of the alignment queues” in claim 16 line 4. Additionally, claim 17 recites “a granted, processing time slot” on line 4 of the respective claim. It is unclear whether this is intended to be the same as or different from the “granted processing time slot” recited in claim 16 line 4.

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Claim 20 recites “a respective one of the alignment queues” in line 3 in the respective claim. It is unclear whether this is intended to be the same as or different from the “respective one of the alignment queues” in claim 16 line 4.

Any claim not specifically addressed above is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, and 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeClair et al. (US Patent No. 6,636,891) in view of Phaal (US Patent No. 6,055,564).

As per claim 1, LeClair teaches the claimed invention comprising:

(a) issuing to the job requestor, a first time stamp representing a respectively scheduled, first time within a timing reference frame of the job processor at which a respective first job is to be preformed (*Col. 8 lines 16-22*);

(b) in response to receipt of the first time stamp, sending from the job requestor to the job processor, a combination of job payload data (*Col. 8 lines 16-22 and lines 37-40*);

(c) in response to receipt by the job processor storing the received job payload data in the job processor; and (*Col. 8 lines 16-22 and lines 37-40*)

(d) causing the job processor to process the stored payload data (*Col. 8 lines 16-22 and lines 37-40*).

LeClair et al. does not teach that in response to receiving and storing the job data that a second time stamp is combined with the job data which causes the job processor to process the job data when the second time stamp occurs. Specifically, LeClair et al. teaches a job processor that issues a job request and then schedules a time that job request to be preformed. Additionally, LeClair et al. teaches storing the job in storage until the time for the job to processes arrives. LeClair et al. does not teach that if the job cannot be processed at first time stamp then the job is stored and given a second time stamp when the job is to be processed.

Phaal teaches a job processor scheduling system that can reschedule processor job based on the availability of the processor when the processor is unable to process the job during a first appointment. Phaal et al. teaches the claimed invention comprising:

(c) in response to receipt by the job processor of the combination of the job payload data and the second time stamp, storing the received job payload data in the job processor; and (*Col.6 lines 59-67and Col. 7 lines 1-8*)

(d) causing the job processor to process the stored payload data when a time corresponding to the second time stamp occurs within the timing reference frame of the job processor (*Col.6 lines 59-67and Col. 7 lines 1-8*).

In summary Phaal teaches a job processor that receives jobs, which are scheduled to be processed, by the job processor, if the processor is unable to process the job at the time the job was given, a second time stamp or second time is given to the job when the processor can process the job.

It would have been obvious for one of ordinary skill in the art to combine the teaching of LeClair et al. and Phaal because they both teach job scheduling systems for job processors in computer systems. Phall et al. teaches the deficiency of LeClair et al. by teaching that if a job cannot be processor issuing another time stamp when the processor can process the job.

As per claim 41, LeClair et al. and Phaal teach the claimed invention comprising:

(a) adding an independently-clocked data-sourcing circuit to the system where the data-sourcing circuit sends requests to one or more other parts of the system for processing of data sourced by the data-sourcing circuit;

(b) causing the system to respond to processing requests sent by the added-on, data-sourcing circuit with corresponding grant signals, where the grant signals include one or more time stamps indicating a time point with a timing frame of processing part of the system that is scheduled to process the data sourced by the data-sourcing circuit (*LeClair et al.: Col. 8 lines 16-22 and lines 37-40 Phaal: Col.6 lines 59-67and Col. 7 lines 1-8*).

As per claim 42 and 44, LeClair et al. teaches the claimed invention comprising:

adding a new circuit board to the system, where the added independently-clocked data-sourcing circuit resides on the new circuit board (*It would have been obvious to one of ordinary skill in the art to add a independently clocked data source circuit on a new circuit board within the system so that the independently clock data source does not conflict with other clocks of the digital system*).

As per claim 43, LeClair et al. and Phaal teach the claimed invention comprising:

(a) adding an independently-clocked data-processing circuit to the system where the data-processing circuit receives requests from one or more other parts of the system for processing of data sourced by data-sourcing circuits within the system;

(b) causing the added-on data-processing circuit to respond to processing requests received from the one or more other parts of the system by outputting corresponding grant signals, where the grant signals include one or more time stamps indicating a time point with a timing frame of the added-on data-processing circuit when the system sourced data is scheduled to be processed (*LeClair et al.*: Col. 8 lines 16-22 and lines 37-40 *Phaal*: Col.6 lines 59-67 and Col. 7 lines 1-8).

Allowable Subject Matter

Claims 3-21 and 36-40 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Weinman whose phone number is (571) 272-2744. The examiner can normally be reached on Monday-Friday from 8:00-4:30.

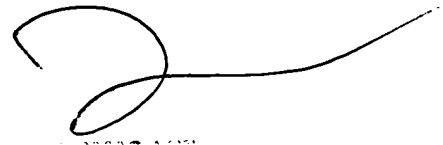
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (571) 272-3667. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sean Weinman
Examiner
Art Unit 2115



SEAN WEINMAN
EXAMINER
ART UNIT 2115